

Attorney Docket No. : 5762.200-US  
Application Serial No.: 09/577,694  
Filed: May 22, 2000  
Inventors: Sorensen et al.  
Via Facsimile : 703-872-9306

#### REMARKS

Applicants have amended the previously pending claims and added new claims in this response.

All claims now require a stopper that has the claimed amount of polyolefin and butyl based rubber and less than or equal to 10% fillers and less than or equal to 1% additives. Of course, the polyolefin is still not an elastomeric thermoplastic.

In the previous office action, the Examiner rejected the claims as unpatentable over Kasai et al under 35 USC 103. Applicants disagree with the Examiner assertion that the pending claims are obvious.

First obviousness requires that each and every limitation of the pending claims, even the negative limitations, be present in the prior art. Here, Kasai does not teach a stopper that does not contain at least 10 % thermoplastic elastomer have reduced leakage when compared to a rubber stopper.

Kasai's invention basically comprises a blend of 30 to 90% by weight of butyl rubber and 70 to 10% by weight thermoplastic elastomer. (See col. 2 lines 24-27). Kasai states clearly that for their invention to work, the stopper must have at least 10% elastomer added to the rubber.

Applicants invention on the other hand comprises butyl rubber and non-elastomeric thermoplastic polyolefin and additives of less than 1 % (or at most 1%). Thus, since applicants claims are limited to a stopper having no more than 1 % additives, the additives, even if all of

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the additives were to be elastomeric thermoplastic, this would not cause applicants stopper to have the minimum 10% elastomer thermoplastic has required by Kasai. At best it would be 1% elastomer thermoplastic And Kasai asserts that this would not work

Moreover, Kasai does not teach that a stopper made from thermoplastic and rubber with 1 % or less additives and 10% or less fillers results in a better seal. The Kasai stopper that results in a better seal contains at least 10% elastomer thermoplastic. The presently pending claims do not allow for 10% elastomer thermoplastic to be present.

Second, obviousness cannot be found were a reference teaches away. Here Kasai teaches clearly and unambiguously that the stopper must have at least 10% thermoplastic elastomer. None of the pending claims would allow for a stopper having that level of elastomer thermoplastic. As is discussed above the most elastomer thermoplastic present in applicant's stopper would be if all of the 1% of additives were elastomeric thermoplastic.

Moreover, since Kasai absolutely requires at least 10% thermoplastic elastomer, one cannot assume, as the Examiner did in the last Office Action, that the Kasai stopper would inherently have the same shore hardness as applicants' stopper. Thus, there is no factual basis for the Examiner to assume that the Kasai stopper would have the same shore hardness claimed by

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applicants.


Finally, since applicants stopper is not obvious in view of Kasai, the stopper of claim 76 is not obvious in view of Kasai in view of Rheude.

#### Conclusion

In view of the above, it is respectfully submitted that all claims are in condition for allowance. Early action to that end is respectfully requested. The Commissioner is hereby authorized to charge any fees in connection with this application and to credit any overpayments to Deposit Account No. 14-1447. The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

Respectfully submitted,

Date: June 13, 2005

  
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